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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/474,114	12/29/1999	KARL W HAIDER	MO-5457/MD-9	1888

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PATENT DEPARTMENT
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EXAMINER

SERGEANT, RABON A

ART UNIT	PAPER NUMBER
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1711

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DATE MAILED: 12/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action SummaryApplication No.
09/474,114Applicant(s)
Haider et al.Examiner
Rabon SergeantArt Unit
1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 3, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 3, 2002 has been entered.
2. Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants have not provided support for claiming that the aliphatic or cycloaliphatic diisocyanates are non-crystalline and that the diol chain extender is symmetric.
3. Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants have provided no guidance for determining the crystallinity of the diisocyanates.
4. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The subject matter of claim 8 fails to further limit claim 1, because claim 8 recites chain extenders that are not symmetric.
5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yokelson et al. ('543).

Patentees disclose the production of hydrophobic polyurethanes derived from the reaction of difunctional polybutadienes, having molecular weights which overlap applicants' diols, with diisocyanates, such as isophorone diisocyanate and dicyclohexylmethane diisocyanate, and diol chain extenders. Patentees further disclose that prepolymer techniques may be employed to produce the polymer. Therefore, applicants' prepolymer isocyanate content is considered to be

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inherently met by the reference. See abstract; column 2, lines 45+; column 3; and column 5, lines 1-16.

7. In addition to the (cyclo)aliphatic diisocyanates, patentees disclose the use of aromatic diisocyanates to produce the polyurethanes. If the reference is determined to not be anticipatory, in view of this additional disclosure, the position is taken that one of ordinary skill in the art seeking light stable polyurethanes would have been motivated to utilize the disclosed (cyclo)aliphatic diisocyanates, since it has long been known that polyurethanes derived from nonaromatic diisocyanates possess superior light stability properties, as compared to polymers derived from aromatic isocyanates.

8. Applicants' arguments have been considered; however, they are insufficient to withdraw the rejection. Firstly, applicants have in no way established that the disclosed (cyclo)aliphatic diisocyanates are not non-crystalline. It is noted that the disclosed (cyclo)aliphatic diisocyanates are specifically recited within applicants' claims. Similarly, patentees specifically rely on the use of chain extenders that are symmetric. Secondly, applicants' arguments with respect to the expense of aliphatic isocyanates are irrelevant with respect to the anticipation rejection and fail to adequately rebut the *prima facie* case of obviousness, wherein a reasonable motivation has been provided for selecting the (cyclo)aliphatic diisocyanates. Lastly, applicants' argument with respect to the composition being compressed within the mold is without merit. Applicants' claim language is open to the inclusion of such treatments.

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9. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Taylor et al. ('166).


The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

10. Applicants' arguments concerning non-crystallinity fail to address the fact that patentees disclose the use of specific diisocyanates which are the same as claimed by applicants. It is logical to conclude that these identical diisocyanates must also be non-crystalline.

11. The prior art rejection in view of Haider et al. ('324) has been withdrawn in view of applicants' amendments and arguments concerning the symmetry of the chain extender; however, it is noted that claim 8 recites asymmetric chain extenders. If the subject matter of claim 8 is not amended to conform with the requirements of the independent claim, the art rejection will be reinstated.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

R. Sergent
December 9, 2002


RABON SERGENT
PRIMARY EXAMINER